

gastric, ovarian, colorectal, prostate, pancreatic, lung, vulval, thyroid, hepatic carcinomas, sarcomas, glioblastomas, and various head and neck tumours); leukemias and lymphoid malignancies, other disorders such as neuromal, glial, astrocytic, hypothalamic and other glandular; macrophagal, epithelial, stromal and blastocoele disorders; and inflammatory, angiogenic and immunologic disorders. The present sequence represents human p50 which is given in the exemplification of the present invention

Sequence 406 AA;

Query Match 100.0%; Score 138; DB 5; Length 406;
Best Local Similarity 100.0%; Pred. No. 4.3e-11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 EYEKIKTVKESATBEKLTPTVLAQKQAL 30
121 EYEKIKTVKESATBEKLTPTVLAQKQAL 150

RESULT 6

AAB58968 standard; protein; 465 AA.

AAB58968;

27-MAR-2001 (first entry)

Breast and ovarian cancer associated antigen protein sequence SEQ ID 676.

Human; breast cancer; ovarian cancer; cytostatic; immunosuppressive; neurotropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antitumor; vulnerable; anticonvulsant; antibacterial; antifungal; antiparasitic; cardiac; immune disorder; Addison's disease; allergy; autoimmune haemolytic anaemia; autoimmune thyroiditis; diabetes mellitus; Crohn's disease; multiple sclerosis; rheumatoid arthritis; ulcerative colitis; cardiovascular disorder; wound healing; neurological disease.

Homo sapiens.

WO200055173-A1.

21-SEP-2000.

08-MAR-2000; 2000MO-US005881.

12-MAR-1999; 99US-0124270P.

(HUMA-) HUMAN GENOME SCI INC.

Rosen CA, Ruben SM;

WPI, 2000-611515/58.

N-PSDB; AAF21871.

New human breast and ovarian cancer associated gene sequences and the polypeptides encoded by these genes, useful in the prevention, treatment and diagnosis of cancer, immune disorders, cardiovascular disorders and neurological diseases.

Claim 11; Page 1126-1128; 1299pp; English.

Sequences AAF21614 - AAF22031 represent DNA sequences encoding human proteins AAB58711 - AAB59128. The DNA and protein sequences are associated with breast and ovarian cancer. Included in the invention are sequences AAF22032 - AAF22040 and AAB59129 which are used in the isolation and characterization of the DNA and protein sequences of the invention. The breast and ovarian cancer associated DNA, protein, agonist or antagonist sequences exhibit cytostatic; immunosuppressive; neurotropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antitumor; vulnerable; anticonvulsant; antibacterial; antifungal; antiparasitic and cardiac activity. The polynucleotide and

protein sequences are used in the diagnosis of cancer, particularly breast and ovarian cancer. The nucleic acid sequences, proteins, agonists and antagonists may also be used in the diagnosis, prevention and treatment of immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; cardiovascular disorders such as myocardial ischaemia; wound healing; infectious diseases

Sequence 465 AA;

Query Match 100.0%; Score 138; DB 3; Length 465;
Best Local Similarity 100.0%; Pred. No. 5e-11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 EYEKIKTVKESATBEKLTPTVLAQKQAL 30
180 EYEKIKTVKESATBEKLTPTVLAQKQAL 209

RESULT 7

ABP53019 standard; protein; 183 AA.

ABP53019;

05-NOV-2002 (first entry)

Mouse p50 amino acid sequence SEQ ID NO:54.

Cellular proliferation inhibition; cytostatic; antiinflammatory; cancer; p50 inhibitor; dynamin inhibitor; gene therapy; tumor; carcinoma; sarcoma; glioblastoma; leukemia; lymphoid malignancy; neuronal disorder; glial disorder; astrocytic disorder; hypothalamic disorder; inflammatory; glandular disorder; macrophagal disorder; epithelial disorder; stromal disorder; blastocoele disorder; angiogenic disorder; immunologic disorder.

Mus musculus.

WO200264779-A2.

22-AUG-2002.

21-JAN-2002; 2002MO-US001708.

14-FEB-2001; 2001US-00782816.

(REGC) UNIV CALIFORNIA.

Sharp DJ, Rogers GC, Scholey JM;

WPI, 2002-657599/70.

New peptide inhibitors of p50/dynamin useful for treating cancer by inhibiting cellular proliferation, e.g. benign or malignant tumors, leukemia and lymphoid malignancies, or inflammatory, angiogenic and immunologic disorders.

Disclosure; Fig 2; 55pp; English.

The present invention describes an isolated peptide (I) comprising or having at least 90% identity to (P1) or (P2). Where (P1) and (P2) are the sequences given in ABP52966 and ABP52967 and can have C-terminal and N-terminal extensions. (I) have cytostatic and antiinflammatory activities and can be used as p50/dynamin inhibitors and in gene therapy. The peptides, nucleic acid molecules and methods from the present invention are useful for treating cancer by inhibiting cellular proliferation, such as benign or malignant tumors (renal, liver, kidney, bladder, breast, gastric, ovarian, colorectal, prostate, pancreatic, lung, vulval, thyroid, hepatic carcinomas, sarcomas, glioblastomas, and various head and neck tumours); leukemias and lymphoid malignancies, other disorders such

Exhibit 1